REMARKS

Claims 1-25 are rejected. Claim 1 has been amended. Claims 2, 7-9, 11 and 22-24 have been canceled. Claims 1, 3-6, 10, 12-21, and 25 are presently pending in the application. Favorable reconsideration of the application in view of the following remarks is respectfully requested.

The basis for the amendment to claim 1 is found in claims 9, 11 and 22-24 as originally filed.

Rejection of Claims under 35 U.S.C. § 102(b):

In paragraph 2 of the Office Action the Examiner has rejected claims 1-8 and 12-23 under 35 U.S.C. § 102(b) as being anticipated by Darsillo et al. (US 6,365,264). The Examiner indicates that Darsillo et al. discloses a recording medium having a glossy coating thereon with a first and second group of particles. The Examiner states that the particles may be treated to form a shell of aluminum chlorohydrate. The Examiner further states that this treatment should inherently shell the particles. This rejection is respectfully traversed.

Darsillo et al. discloses a recording medium with two different particles. However, Darsillo et al. fails to disclose an image-receiving element with a porosity of greater than 40% and a 60° gloss of greater than 15 as claimed by the present invention as amended. Furthermore, Darsillo et al. does not disclose shelled particles as disclosed in the present invention. Examples 14-16 of Darsillo et al. include pyrogenic alumina, which is a cationic particle but is not shelled. Cationic particles differ from shelled particles as defined in the present invention. A cationic particle is simply a particle with a positive charge. For example, it is well known that alumina and zirconia are cationic, while silica and titania are anionic, or negatively charged. On page 5, lines 4-8 of specification as originally filed the term shelled is used to indicate that the surfaces of the particles have been chemically modified with a composition of matter that is distinctly different from that of the core, or interior of the particles. Therefore, it is respectfully urged that Darsillo et al. does not disclose shelled particles as claimed by the instant invention. Furthermore, claim 1 now incorporates claims 9 and 11

which are not rejected under 35 U.S.C. § 102(b). Therefore, it is respectfully urged that Darsillo et al. does not anticipate all of the present invention's claimed limitations as amended, and that this rejection be reconsidered and withdrawn.

Rejection of Claims under 35 U.S.C. § 103:

In paragraph 3 of the Office Action the Examiner has rejected claims 1-23 under 35 U.S.C. § 103 as being unpatentable over Darsillo et al. for the reasons of record and the reasons below. This rejection is respectfully traversed.

As discussed above Darsillo et al. discloses a recording medium with two different particles, however, fails to disclose shelled particles. Darsillo et al. does not demonstrate the advantages of porosity, gloss and image fade resistance as in the instant invention. It is respectfully urged that Darsillo et al. does not indicate a preference for cationically shelled particles but merely states that "[i]t is sometimes preferred that that cationic particles be included in glossy coating." Furthermore, none of the examples disclosed in Darsillo et al. include surface treated, or cationically shelled particles of any kind. Examples 14-16 of the reference include pyrogenic alumina, which is a cationic particle, but it is not shelled. As discussed above there is an important distinction between a cationic particle and a shelled particle. A cationic particle is simply a particle with a positive charge. However, a shelled particle is a particle in which the surface of the particle has been chemically modified with a composition of matter that is distinctly different from that of the core, or interior of the particle. Therefore, it is respectfully urged that the particles as disclosed in Darsillo et al. have not been chemically modified as in the present invention.

Applicants would further like to clarify the term image fade resistance as disclosed in the instant invention. As the Examiner has correctly pointed out it is well known that cationic materials will fix anionic dyes, making them less subject to bleeding and "fading." The proper term for this property is bleeding or water-fastness. Image fade resistance in our case is distinct in that it refers to light-fastness and oxidative resistance of the image in dry conditions. This is defined in the background of the instant invention on page 2 lines 8-10, and further on page 4 lines 23-28. The materials defined in the instant invention

are selected from a unique set of materials that have been shown to provide light-fastness and oxidation resistance also known as image fade resistance.

Applicants kindly direct the Examiner to the data of Table 1. The examples C1-C7 are essentially directly comparable to those of Darsillo et al. and essentially reproduce the reference result (a trade off between porosity and gloss with no fade resistance). The instant invention demonstrates surprising results in light of Darsillo et al. When particles that have a surface-modification providing image fade resistance are used to construct an image recording medium, highly porous and highly glossy coatings are obtained at relatively high fractions of large particles over a limited range. This is demonstrated in Table 1 of the specification at page 18.

Table 1

Example	Percent Small Particles	Percent Large Particles	Shell	Percent Porosity	60° Gloss (%)	Percent Magenta Fade	Percent Cyan Fade
C-1	100	0	None	42	40	40	11
C-2	89	11	None	45	31	48	40
C-3	77	23	None	48	29	26	50
C-4	66	34	None	52	12	28	50
C-5	55	45	None	55	6	19	47
C-6	44	56	None	60	5	17	60
C-7	32	68	None	65	9	12	54
C-8	100	0	Yes	33	4	3	0
C-9	89	11	Yes	37	7	0	0
I-1	77	23	Yes	42	16	0	6
I-2	66	34	Yes	39	29	1	18
I-3	55	45	Yes	48	29	2	15
I-4	44	56	Yes	52	33	4	25
I-5	32	68	Yes	58	31	4	11

For the comparison examples, the general trends taught in the art are observed, porosity increases and gloss decreases as the percentage of large particles increases, see C-1 through C-7. However, for the inventive examples wherein the particles are shelled with a material providing image fade resistance, surprisingly, gloss increases upon introduction of larger particles, and concurrent, high-porosity, high-gloss and low-fade are achieved only over the inventive region, having a surprisingly high-fraction of large particles.

In Darsillo et al. glossy coatings are obtained only after calendering the coating, see Table 3 column 17. Calendering is a method applying pressure to the coating surface to make it smoother and hence to improve gloss. Calendering can be both expensive and time consuming. Compare the results for the comparison example 3A with that of example 3 in Darsillo et al., the gloss is poor for both, unless calendering is used, and exhibits the usual trend of improved gloss for introduction of smaller particles.

Therefore, it is respectfully urged that the present invention as amended is non-obvious since Darsillo et al. does not teach concurrently achieving high-porosity, high-gloss and image fade resistance by use of shelled particles as disclosed in the present invention as amended. Furthermore, image fade resistance would not have been an inherent property of Darsillo et al. because the reference did not teach the use of the image fade resistant materials as claimed in the instant invention. Therefore, it is respectfully requested that this rejection be reconsidered and withdrawn.

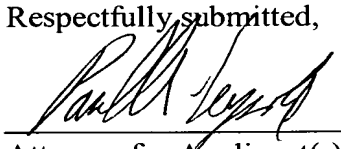
In paragraph 4 of the Office Action the Examiner has rejected claims 1-25 under 35 U.S.C. § 103 as being unpatentable over Darsillo et al. in view of Bi et al. (2004/0197498) and further in view of Alexander et al. (3,007,878). The Examiner indicates that Bi el al. discloses treating silica particles to make them cationic for inclusion in an ink jet recording sheet. The Examiner further indicates that Alexander et al. discloses the surface of silica that is complexed with a metal oxyhydroxy material. The Examiner states that it would have been obvious to one of ordinary skill in the art to treat the silica of Darsillo et al. as set forth in Bi el al. and Alexander et al. to render the silica cationic. This rejection is respectfully traversed.

As discussed above Darsillo et al. discloses a recording medium with two different particles, however, fails to teach particles shelled with hydrolyzable organosilanes, aluminasilicate polymers or metal oxyhydroxy complexes, and further fails to teach porosity and gloss as claimed in the present invention as amended. Bi et al discloses a two-layer coating in which each layer is composed of cationic silica, but fails to teach shelled particles as disclosed in the present invention. Alexander et al. discloses coating the surface of silica with an oxygen compound of a polyvalent metal added as basic salt. However, none of these references alone or in combination teach an image-receiving element containing

two different sized particles shelled with hydrolyzable organosilanes, aluminasilicate polymers or metal oxyhydroxy complexes, and wherein the element has both porosity and gloss as claimed in the present invention as amended. Therefore, it is respectfully requested that this rejection be reconsidered and withdrawn.

Therefore, it is respectfully requested that the rejections under 35 U.S.C. § 102(b) and 35 U.S.C. § 103(a) be reconsidered and withdrawn and that an early Notice of Allowance be issued in this application.

Respectfully submitted,



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